AUTODOC CLUB

How to change front suspension strut on **AUDI A3 Sportback (8VA, 8VF)** – replacement guide

SIMILAR VIDEO TUTORIAL

This video shows the replacement procedure of a similar car part on another vehicle

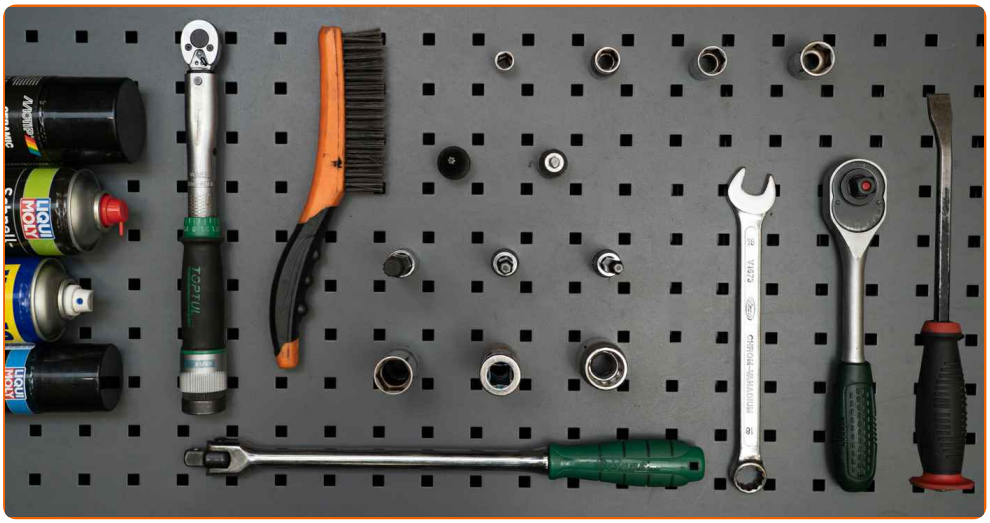
Important!

This replacement procedure can be used for:
AUDI A3 Sportback (8VA, 8VF) 2.0 TDI, AUDI A3 Sportback (8VA, 8VF) 1.4 TFSI, AUDI A3 Sportback (8VA, 8VF) 2.0 TDI quattro, AUDI A3 Sportback (8VA, 8VF) 1.8 TFSI, AUDI A3 Sportback (8VA, 8VF) 1.6 TDI, AUDI A3 Sportback (8VA, 8VF) S3 quattro, AUDI A3 Sportback (8VA, 8VF) 1.8 TFSI quattro, AUDI A3 Sportback (8VA, 8VF) 1.2 TFSI, AUDI A3 Sportback (8VA, 8VF) 1.4 TFSI g-tron, AUDI A3 Sportback (8VA, 8VF) 1.4 TSI, AUDI A3 Sportback (8VA, 8VF) 2.0 TFSI, AUDI A3 Sportback (8VA, 8VF) RS3 quattro, AUDI A3 Sportback (8VA, 8VF) 1.6 TDI quattro, AUDI A3 Sportback (8VA, 8VF) 1.4 TFSI e-tron, AUDI A3 Sportback (8VA, 8VF) 1.0 TFSI, (+ 10)

The steps may slightly vary depending on the car design.

This tutorial was created based on the replacement procedure for a similar car part on: VW Golf VII Hatchback (5G1, BQ1, BE1, BE2) 1.8 TSI

REPLACEMENT: SUSPENSION STRUT – AUDI A3 SPORTBACK (8VA, 8VF). TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Ceramic grease
- Copper grease
- Torque wrench
- Combination spanner #18
- Drive socket # 13
- Drive socket # 16
- Drive socket # 18
- 12-point socket # 24
- 21-mm strut nut socket
- Shock absorber socket
- HEX bit no.H7
- XZN bit # 6
- XZN bit # 14
- Wheel impact socket #17
- Ratchet wrench
- Tap wrench
- Hydraulic strut spring compressor
- Crow bar
- Hydraulic transmission jack
- Fender cover
- Wheel chock

Buy tools

Replacement: suspension strut – AUDI A3 Sportback (8VA, 8VF). Tip from AUTODOC:

- Both shock struts of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock struts of the front suspension.
- Please note: all work on the car – AUDI A3 Sportback (8VA, 8VF) – should be done with the engine switched off.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

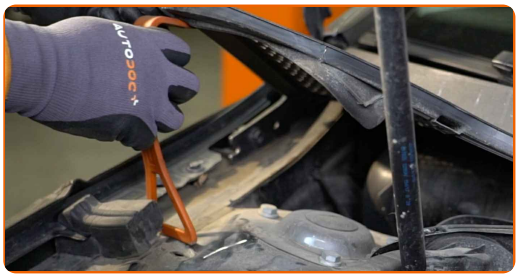
1 Open the bonnet.

2 Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.

3 Remove the cowl grille seal.

4 Remove the clips of the plastic cowl grille. Use a crowbar.

5 Move the cowl grille aside to access the fasteners of the suspension strut mount.



6 Clean the fasteners of the shock strut upper mount. Use a wire brush. Use WD-40 spray.

7 Loosen the upper fasteners of the suspension strut. Use a drive socket #13. Use a ratchet wrench.

8 Secure the wheels with chocks.

9 Loosen the wheel mounting bolts. Use wheel impact socket #17.

10 Raise the car.

Replacement: suspension strut – AUDI A3 Sportback (8VA, 8VF). Tip from AUTODOC:

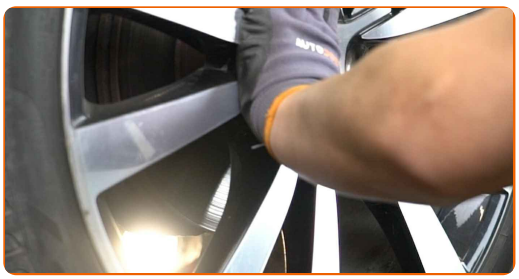
- If you are using a jack, make sure it rests on a flat surface without any unevenness.
- Be sure to additionally secure the car with jack stands.

11 Unscrew the wheel bolts.

AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts. AUDI A3 Sportback (8VA, 8VF)

12 Remove the wheel.



13 Clean the fastener that connects the sway bar link to the suspension strut. Use a wire brush. Use WD-40 spray.

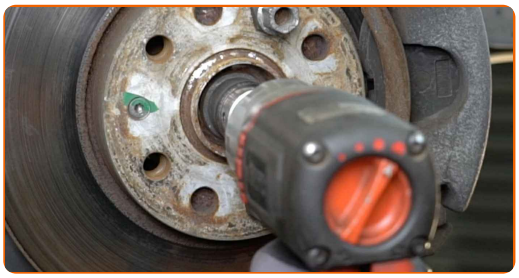
14 Unscrew the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #18. Use XZN #6. Use a ratchet wrench.

15 Remove the stabilizer rod.

16 Clean the lower fastener connecting the suspension strut to the steering knuckle. Use a wire brush. Use WD-40 spray.

17 Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a drive socket #18. Use XZN #14. Use a ratchet wrench.

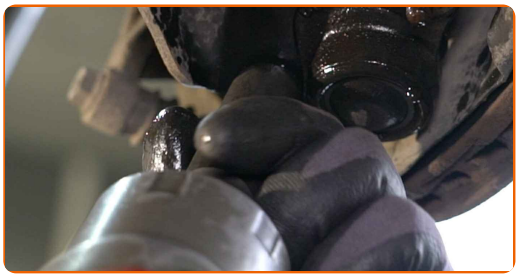
18 Unscrew the fastener connecting the drive shaft to the wheel hub. Use 12-point socket No.24. Use a tap wrench.



19 Remove the fastening bolt.

20 Clean the fasteners connecting the ball joint to the suspension control arm. Use a wire brush. Use WD-40 spray.

21 Unscrew the fasteners connecting the ball joint to the control arm. Use a drive socket #16. Use a ratchet wrench.



22 Disconnect the ball joint from the control arm.

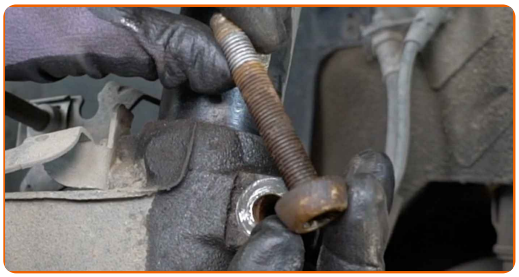
23 Prop up the steering knuckle. Use a hydraulic transmission jack.

24 Detach the driveshaft from the steering knuckle.

Replacement: suspension strut – AUDI A3 Sportback (8VA, 8VF). Tip from AUTODOC:

- Make sure that the drive shaft is not unloaded (when the car is jacked).

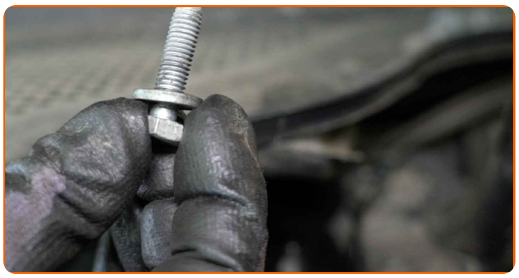
25 Remove the fastening bolt.



26 Release the lower fastener connecting the shock strut to the steering knuckle. Use a special drive socket to remove the shock absorber.

27 Disconnect the steering knuckle from the shock absorber strut.

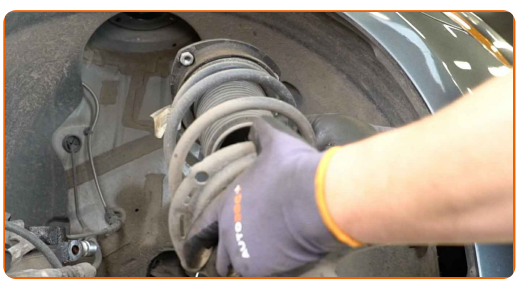
28 Unscrew the upper fasteners of the shock strut.



AUTODOC recommends:

- AUDI A3 Sportback (8VA, 8VF) – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

29 Remove the suspension strut.

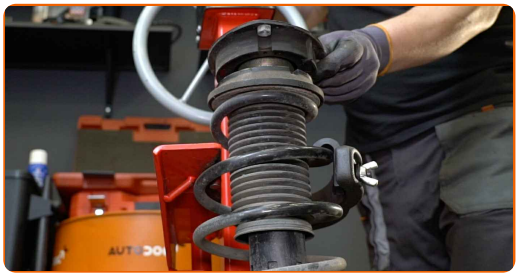


30 Set the suspension strut on the spring compressor tool.

AUTODOC recommends:

- Note that when using a spring compressor, spring coils need to be securely gripped, compressing the spring on the opposite sides.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils tightly entered the lock handles.

31 Compress the spring.

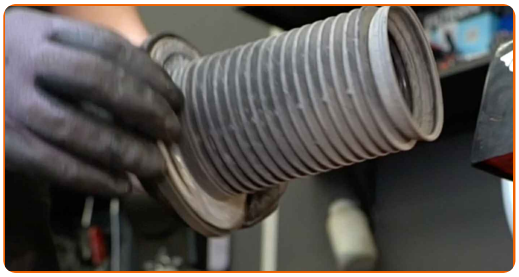


32 Clean the strut piston rod. Use a wire brush. Use WD-40 spray.

33 Remove the strut piston rod nut. Use a 21-mm strut nut socket. Use HEX No.H7. Use a ratchet wrench.

34 Remove the upper strut mount together with the bump stop.

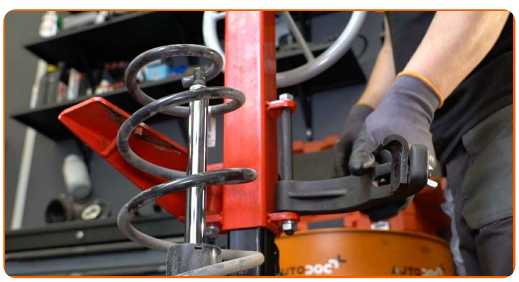
35 Remove the dust boot.



AUTODOC recommends:

- Replacement: suspension strut – AUDI A3 Sportback (8VA, 8VF). Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

36 Release the coil spring.



37 Remove the spring.

38 Remove the rubber spring spacer.

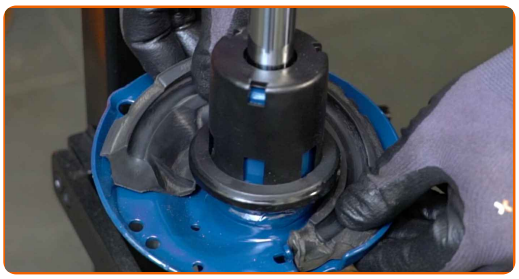
39 Remove the old shock absorber from the hydraulic coil spring compressor.

40 Install the new shock absorber on the hydraulic coil spring compressor.

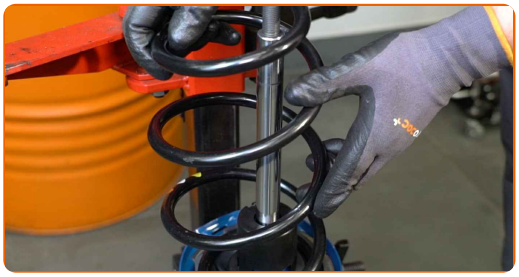
AUTODOC recommends:

- Before installing a new shock absorber you should pump it manually 3-5 times.

41 Install the rubber spring spacer.



42 Install the spring on the shock absorber.



43 Compress the spring.

44 Install the dust boot.

45 Install the upper strut mount together with the bump stop.

46 Tighten the shock strut piston rod nut. Use a 21-mm strut nut socket. Use HEX No.H7. Use a torque wrench. Tighten it to 60 Nm torque.

47 Decompress the spring.

48 Treat the shock strut rod. Use copper grease.

49 Remove the assembled shock strut.

50 Clean the suspension strut mounting seat on the steering knuckle. Clean the splines of the drive shaft CV joint. Clean the CV axle mounting seat. Clean the ball joint mounting seat. Clean the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.

51 Install the shock strut into the wheel arch.

Replacement: suspension strut – AUDI A3 Sportback (8VA, 8VF). AUTODOC experts recommend:

- Make sure that the suspension strut is installed in the correct position, according to the markings.

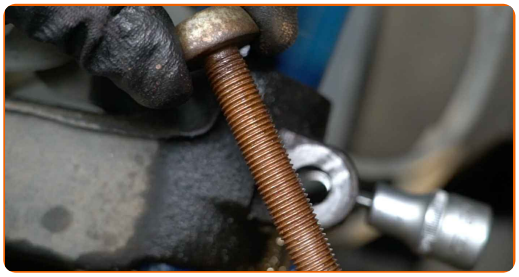
52 Secure the upper fasteners of the shock strut. Do not tighten it.

AUTODOC recommends:

- AUDI A3 Sportback (8VA, 8VF) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

53 Fix the shock absorber strut on the steering knuckle.

54 Install the fastening bolt.



55 Remove the support from under the steering knuckle.

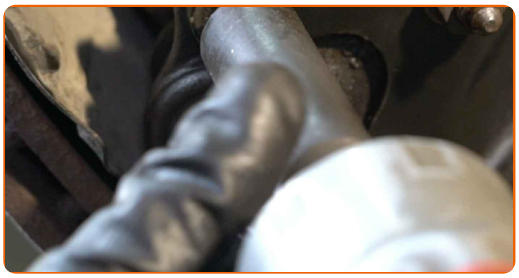
AUTODOC recommends:

- Replacement: suspension strut – AUDI A3 Sportback (8VA, 8VF). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

56 Install the drive shaft.

57 Attach the ball joint to the control arm.

58 Tighten the fasteners that connect the ball joint to the suspension arm. Use a drive socket #16. Use a ratchet wrench.



59 Screw in the fastener that connects the shock strut to the steering knuckle. Use a drive socket #18. Use XZN #14. Use a ratchet wrench.

60 Install and tighten the drive shaft bolt. Use 12-point socket No.24. Use a ratchet wrench.

61 Clean the sway bar link fastener.

62 Install the transverse stabilizer link.

63 Screw in the fastener connecting the sway bar link to the suspension strut. Use a combination spanner #18. Use XZN #6. Use a ratchet wrench.

64 Prop up the steering knuckle. Use a hydraulic transmission jack.

65 Tighten the bolt connecting the drive shaft to the wheel hub. Use 12-point socket No.24. Use a torque wrench. Tighten it to 200 Nm torque.

66 Remove the support from under the steering knuckle.

AUTODOC recommends:

- Lower the hydraulic transmission jack smoothly, without jerks, to avoid damaging assemblies and mechanisms.

67 Tighten the lower fasteners of the suspension strut. Use a drive socket #18. Use XZN #14. Use a torque wrench. Tighten it to 70 Nm torque.+90°

68 Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #18. Use XZN #6. Use a torque wrench. Tighten it to 65 Nm torque.

69 Tighten the fasteners connecting the ball joint to the control arm. Use a drive socket #16. Use a torque wrench. Tighten it to 40 Nm torque.+45°

70 Treat the fastener that connects the sway bar link to the suspension strut. Treat the fastener that connects the suspension strut to the steering knuckle. Treat the ball joint fastener. Use copper grease.

71 Clean the wheel rim mounting seat. Use a wire brush.

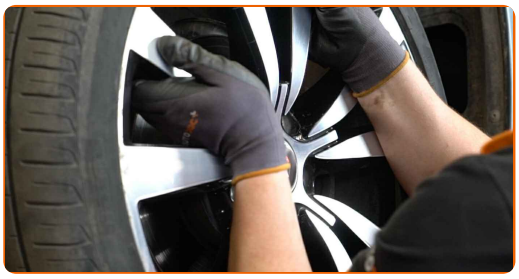
72 Treat the surface where the brake disc contacts the wheel rim. Use ceramic grease.

73 Clean the brake disk surface. Use a brake cleaner.

AUTODOC recommends:

- Replacement: suspension strut – AUDI A3 Sportback (8VA, 8VF). After applying the spray, wait a few minutes.

74 Install the wheel.



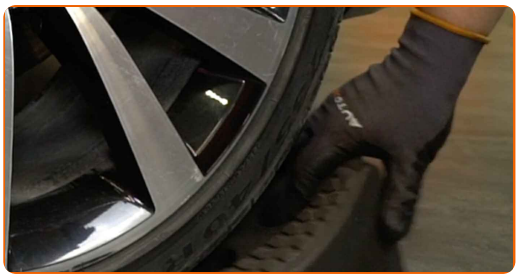
AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. AUDI A3 Sportback (8VA, 8VF)

75 Screw in the wheel bolts. Use wheel impact socket #17.

76 Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 120 Nm torque.

77 Remove the jacks and chocks.



78 Tighten the upper fasteners of the shock strut. Use a drive socket #13. Use a torque wrench. Tighten it to 15 Nm torque.+90°

79 Treat the fasteners of the shock strut mount. Use copper grease.

80 Install and secure the cowl grille.

81 Install the cowl grille seal.

82 Remove the fender protection cover.

83 Close the hood.

WELL DONE!

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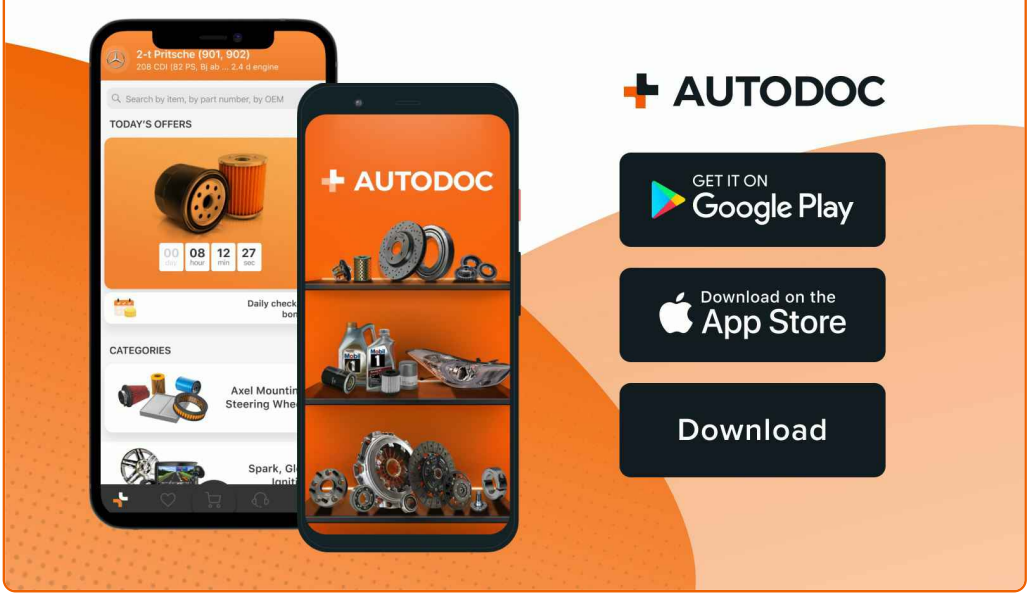

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